An aerial photograph of a Navy fighter jet, likely an F/A-18 Hornet, in flight. The aircraft is viewed from a high angle, showing its wings, fuselage, and tail. A semi-transparent mission planning overlay is visible on the right side of the aircraft, showing a flight path and various data points. The background is a clear blue sky.

Naval Mission Planning Systems (NavMPS)

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September 9, 20



FY2003 MISSION PLANNING OAG OPNAV PERSPECTIVE



11 Feb 03

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Agenda



- PRO5 Driving Factor
 - BFC2 MCP
- What is BFC2 MCP
- Mission Planning Issues within the BFC2 MCP
- Challenges
- Summary



PRO5 Driving Factor



- The recent N61 budget cycle is driven by something called *Battle Force Command and Control Mission Capability Package* (BFC2 MCP)
 - Not perfectly balanced
 - Assessments based on best professional judgment, traditional program boundaries
- Produce an operationally and fiscally balanced program consistent with Naval priorities
- Budgeting process that is linked to validated requirements and capabilities



What is BFC2 MCP



- Networks, C2 decision support systems, and shore systems that provide end-to-end networked capability for commanders afloat and ashore to carry out their warfare missions - delivered by Joint and Naval programs
- BFC2 contribute to a bundle of capabilities that supports a key Naval mission that is assessed as high priority in warfighting scenarios that the nation must win
 - Capabilities that must be in place by 2009



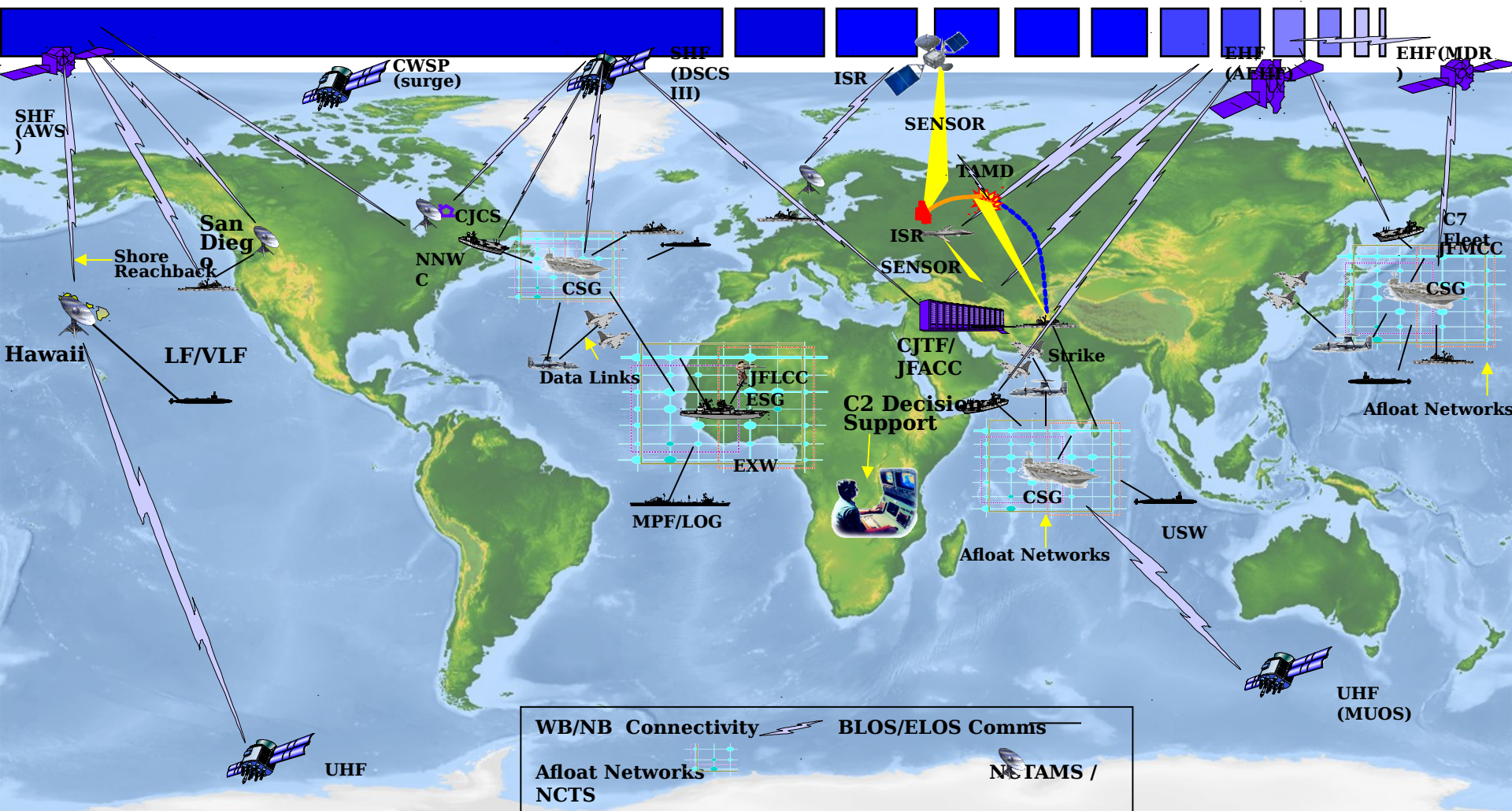
What is BFC2 MCP



- Two types of MCP
 - Effects – an MCP that produces a warfighting outcome
 - Enabler – an MCP that provides the means to support, focus, or enhance an effects-based MCP
- Numerous MPC's
 - I/O, TAMD, TCT, CbT, EXW, USW, SD, NAV, ISR, BFC2
 - Mission Planning falls under several but N6 is focused on BFC2



BFC2 Operational Concept 2009



BFC2 Enables Dispersed Forces to Leverage Military Capability



Mission Planning Issues



- Issue: PGM Mission Planning at TSC/MOCC
- Relevance: P-3C aircraft are a platform of choice for employing SLAM-ER missiles
 - Strike
- Program: GCCS-M Tactical/Mobile; Naval Mission Planning Systems
 - Capability: Provide Tactical Automated Mission Planning System (TAMPS)/Joint Mission Planning System (JMPS) Precision Guided Munitions (PGM) planning at TSC/MOCC to support P-3C SLAM-ER employment



Mission Planning Issues



- Operational Concept: P-3C aircraft are used to fire SLAM-ER missiles. In order to optimize P-3C SLAM-ER employment, this mission planning needs to interface to GCCS-M data available at TSC/MOCC, in addition to the present TAMPs-derived inflight planning capability. This planning would take place in conjunction with the other mission planning already done at the TSC/MOCC for P-3C operations
- Recommendation:
 - Program Modification: Procure mission planning (TAMPs/JMPS) workstations for integration into TSC/MOCC P-3C planning



Mission Planning Issues



- Issue: Joint and interoperable automated mission planning system will not support all DOD aircraft and expeditionary warfare requirements
- Relevance: Joint mandate, Strike, EXW, ISR TACSITS
 - Capability Objective: Utilize Joint platforms, weapons and sensors to put PGM's on target and assist in EXW and special operations mission planning
- Program: Joint Mission Planning System (JMPS)
 - Capability: Tactical Automated Mission Planning System and Navy-Portable Flight Planning Software is being replaced by JMPS



Mission Planning Issues



- Operational Concept: JMPS is a mission planning tool with built in flexibility in order to support aviation warfare requirements, in the near term, and mission planning requirements of other Naval and Joint warfare areas, platform and weapon systems in the future
- Recommendations
 - Program Modification: Build new/additional required capabilities upon the basic tools that currently exist in JMPS
 - Joint Collaboration tool
 - Provide the ability to access, manipulate, correlate, incorporate and display appropriate future mission intelligence systems
 - Query and retrieve imagery
 - Sensor Prediction
 - Communication and Control Planning
 - PGM phased development



Mission Planning Issues



- Concept Refinement: Deploy amphibious and aviation afloat platforms with a mission planning tool with enhanced capabilities to plan synchronously and asynchronously with all joint mission planners within the ForceNet framework
- Consequence of decision / trade-offs:
 - Inadequate collaborative mission planning across afloat platforms and the joint arena
 - Inability to query and retrieve the most recent and pertinent intelligence data for mission planning
 - Inability to optimize aircraft sensor employment based on parametric data



Combined C2 Issue Summary



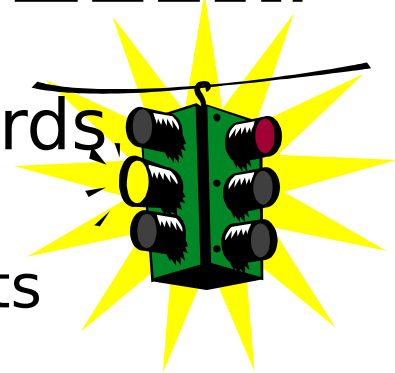
- Tactical Data Links and Combat ID directly contribute to TAMD, Strike and EXW warfighting success in 2009 CONOPS
- Bandwidth capacity affects all capability objectives. Synchronize programs across the FYDP and challenge new requirements to minimize bandwidth shortfalls.
- C2 Network Infrastructure is a force multiplier against asymmetric threats [CbT and USW (ASW/MIW)] that exist now and in 2009
- Mission Planning integration is key to 2009 CONOPS success. Roadmap development will lead to POM06 efficiencies



How Well is MP Positioned to Support BFC2



- Following issues would move MP towards Green status
 - Provide Required Capability Enhancements
 - Enhance ability to Conduct Collaborative Mission Planning Amongst Disbursed Naval and Joint Forces
 - Develop a single overarching Naval Mission Planning roadmap and convergence architecture
 - Integrate the mission planning environment
 - Provide Technological Support to the Warfighter





Requirements Officers Challenges



- OPNAV's Focus is for the best balance of priorities – all priorities
 - BFC2 MCP Mission Planning Issues are addressed as hardware and R&D shortfalls
- FLEET needs are heard when they are reflected in IPL!
 - MP unfunded did not make N6 top ten
- Fiscally constrained
 - Re-capitalization is SECNAV's Priority
- Save the new needs for POM-06!
 - How do we plan for POM 06 in conjunction with Sea Power 21 and the JFMCC Maritime Planning Process



OAG Take-away



- Does the OAG result support the MP issues of BFC2
- Increase understanding and awareness of contribution of BFC2 to the warfighter
 - Greater Fleet involvement
- Build the necessary and sufficient rationale for capability and program trade-offs

Mission Planning...

(TAMPS, PFPS, ATACS, NAWC, JMPS, UPCs)



Without You

We Can't...

Provides the Digital Fuel to Fly the Mission!





Backup





Sea Power 21

Transformational Concepts

Sea Strike

- ❑ ***Project decisive and persistent offensive power anywhere in the world***
- ❑ ***Launch immediate, agile and sustainable operations from the sea***

Sea Shield

- ❑ ***Assure access throughout the battlespace for the Joint Force***
- ❑ ***Project defense around friends, allies, and coalition and the Joint Forces***
- ❑ ***Provide a sea-based layer of homeland defense***

Sea Basing

- ❑ ***Project forces worldwide with capability to fight & win***
- ❑ ***Operate Immediately from an expanded and secure maneuver area - the sea***
- ❑ ***Minimize vulnerabilities tied to overseas land support***

FORCEnet

Align & integrate networks, sensors, weapons and warriors to implement Network Centric Warfare



FUNDING SUMMARY



Functions: USN/USMC aircraft / weapons systems mission planning and data loading. Hardware for NAVSPECWAR Automated Mission Planning System.

Platforms: F/A-18, E-2C, F-14, AV-8B, EA-6B, P-3, S-3, AH-1 / UH-1, CH-46, CH-53, MH-53, H-60 series, V-22, C-2A, KC-130, T-45, JSF, JSOW / JDAM, HARM, SLAM

FYDP Funding (FY05-09) BES-04 RAD I

RDTE: \$89,456K

OPN/APN/WPN: \$65,266K

OMN: \$51,641K

MPN: N/A

Related Programs: GCCS-M, JSIPS-N, NFN, TBMCS / N75 Programs: Expeditionary Warfare (AAAV, LCAC, LCU) / N780 Programs: ATACS/NAWC / Services: USMC (TAMPS / N-PFPS) / USA: MPS / USAF: AFMSS / SOCOM: SOMPE

Nominal Unit Cost: \$10K / \$250K (Mission Planning Seat / Mission Planning Server)

Nominal Install Cost: \$80K (Afloat) / \$3K (Ashore) per unit

Schedule: FY 2002 FY 2004

Milestones: TAMPS 6.2.1 IOC (Jan 02) JMPS OT 2nd/3rd Qtr

IOC(FY): 1986 (TAMPS) 4th Qtr 2004 (JMPS-M)

FOC(FY): NavMPS Continues



- Narrative Description/Capabilities Provided:
- Engineering Support Services:
 - Independent verification and validation test and acceptance
 - Quality Assurance Efforts
 - Site Activation
- Life Cycle Support
 - Site Activation



50 Shore
Installations
Including School
Houses



Current Fielding Plan



- EQUIPMENT NAME: Servers (CVIC Suite), Desktops / Laptops (Combat / Force / Flight), & Peripherals**

PLATFORM		PRIOR YEARS	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	TO COMPLETE
CVIC SUITE	P	23	2	4	6	7	4	7	7	4	Continues
(TAMPS/J MPS-M)	I	23	2	4	6	7	4	7	7	4	Continues
COMBAT	P	167	181								Continues
(TAMPS WS)	I	167	181								Continues
FORCE	P	27			100			100			Continues
	I	27			100			100			Continues
FLIGHT	P	1550	400	748	705	605	923	685	610	948	Continues
	I	1550	400	748	705	605	923	685	610	948	Continues
TOTAL	P	1767	583	752	811	612	927	792	617	952	Continues
	I	1767	583	752	811	612	927	792	617	952	Continues



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